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34610	7590	02/10/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			BASOM, BLAINE T	
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2173

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,458

Applicant(s)

LEE ET AL.

Examiner

Blaine Basom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

The Examiner acknowledges the Applicants' amendments to claims 1, 2, 4, and 7-21, and the Applicants' cancellation of claim 3. Due to these amendments, the objection of claims 9, 11, 12, 17, and 20, as presented in the previous Office Action, is withdrawn. The 35 U.S.C. 112, second paragraph rejection of claims 2, 3, 8, 13-15, 18, and 19, presented in the previous Office Action, is similarly withdrawn in light of the amendments.

Regarding the pending claims, the Applicants assert that the combination of Sumita (U.S. Patent No. 6,581,207 to Sumita et al.) and Cannon (U.S. Patent No. 6,044,365 to Cannon et al.), as presented in the previous Office Action, fails to disclose or suggest all of the claimed features, and also, the Applicants submit that a clear and particular suggestion or motivation to modify Sumita by Cannon is lacking. The Applicants particularly allege, with respect to the former argument, that Sumita and Cannon fail to disclose "a server (provider) system for transmitting an object data expression information table defining expression information about object data having various expressions of the same content, and information about multimedia program data to be serviced to a user, wherein the object data expression information table includes an identifier for expressing at least one first object data of the same content and at least one second object data different from the first object data," as is expressed by amended claim 1. The Applicants fail to produce any further argument for this allegation, however. In response, the Examiner respectfully disagrees with this allegation, and contends that Sumita and Cannon in fact teach such a server system, as is described below in the rejection for claim 1.

Further regarding Sumita and Cannon, the Applicants argue that this combination fails to teach mapping object data for matching user preference information and content description information, whereby as added to claim 15, storing an object data expression information table includes features of defining an identifier link by a UML method for identifying various object data as one object of the same content when one object data is variously expressed. In response, the Examiner presents the “OMG Unified Modeling Language Specification,” which as shown below, teaches defining links by a UML method. The Applicants’ arguments with respect to claim 15 have thus been considered, but are moot in view of the new grounds of rejection below, which are required in response to the Applicants’ amendment.

The Applicants additionally submit that a clear and particular suggestion or motivation to modify Sumita by Cannon is lacking. The Examiner respectfully disagrees. As suggested in the previous Office Action, the Examiner asserts that it would have been obvious to modify Sumita by Cannon, as Cannon provides a means for a more accurate determination of media, given a keyword. Both Sumita and Cannon present systems used to determine multimedia data satisfying a user’s preferences. Sumita particularly discloses that one or more keywords describing the user’s preferences are compared with keywords describing multimedia content, whereby matching keywords indicate content satisfying the user’s preferences (see, for example, column 6, lines 22-56; and column 7, line 33 – column 8, line 3). Cannon notes a problem with such a technique, disclosing that the keywords of the user must exactly match those associated with the media content in order to indicate relevant media content; keywords having similar meanings, but different spellings, would fail to indicate relevant media content (see column 3, lines 33-65). As described in the previous Office Action, and again below, Cannon remedies this

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problem by providing a "thesaurus file." The Examiner thus maintains the assertion that it would have been obvious to modify Sumita by Cannon, because Cannon remedies a deficiency of Sumita, specifically, altering Sumita such that keywords of the user need only have the same meaning, not the same spelling, as keywords describing media content, thus providing a more accurate determination of media content relevant to the user's preferences.

Specification

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification appears to be a literal translation into English from a foreign document and is replete with grammatical and idiomatic errors, thus rendering the specification unclear and non-exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose passages used in the specification are:

As a digital multimedia system such as a digital broadcasting is popularized, there have been lots of attempts to provide a more convenient user-oriented service by reflecting a user preference in providing services related to digital multimedia data. (Page 1, lines 14-17).

In the U.S patent No. 5861884, in providing a help to a user, a user adaptable interface can be provided to a user by using a user history about items frequently searched by the user. For example, when the help is constructed with a tree structure, it is possible to shorten a retrieval

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route to a user requested help by adjusting content retrieved frequently by a user on a more superior level. (Page 1, lines 18-22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-14, and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,581,207, which is attributed to Sumita et al. (and hereafter referred to as “Sumita”), and also over U.S. Patent No. 6,044,365, which is attributed to Cannon et al. (and hereafter referred to as “Cannon”). In general, Sumita describes an “information filtering system” for presenting multimedia programs to a user according to the user’s personal tastes (see column 1, line 59 – column 2, line 34). The user’s taste in programs is maintained via a “user profile,” and is mapped against content description information in order to ascertain multimedia programs of interest to the user (see column 2, lines 22-34). Specifically, an “information filtering unit” performs this mapping (see column 2, lines 22-34). Thus Sumita describes, in a user adaptive multimedia system reflecting user preference information extracted from user history information, an apparatus, namely an information filtering unit, which is for mapping data for an efficient matching between user preference information and content description information.

Specifically regarding claim 1, Sumita describes a server system, called a “broadcasting station,” which is for transmitting an electronic program guide having information about multimedia program data to be serviced to a user (for example, see column 4, lines 36-50). Sumita also describes a client system, specifically an “information filtering unit,” which maps object data by receiving content description information transmitted from the server system, namely the electronic program guide, and performs matching between the content description information and user preference information extracted from user history information regarding prior multimedia programs (see column 4, lines 36-67; and column 6, lines 22-56). Particularly, the information filtering unit performs this mapping by using keywords maintained in the user’s profile to find relevant programs in the electronic program guide (see column 6, lines 22-56). This information filtering unit thus obtains user preference information regarding programs described in the received electronic program guide and reflects the gotten user preference information to a multimedia system, specifically video equipment on the user’s side (for example, see column 4, lines 36-67). Sumita, however, does not explicitly disclose that the server also transmits an “object data expression information table,” which defines expression information about multimedia data having various expressions of the same content, and which as expressed in claim 1, is used to map the multimedia data having various expressions to user preference information.

Like Sumita, Cannon presents a system used to access and present multimedia data according to a user’s preference. Specifically, both Sumita and Cannon disclose that one or more keywords are used to search for and identify multimedia content satisfying user preference information (see column 6, lines 22-56 of Sumita; and column 2, lines 62-67 of Cannon).

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Regarding this use of keywords to identify multimedia content, Cannon describes a problem, stating that although various expressions usually identify the same multimedia content, only one keyword is accepted to search for and access the multimedia content; meaning that the exact keyword must be known to identify the content (see column 3, lines 33-65). Cannon remedies this problem with a thesaurus file comprising a plurality of expressions, whereby each expression in the thesaurus is linked to one or more “referent sets,” and whereby each referent set is in turn linked to a multimedia entity (see column 4, lines 39-65; and column 6, line 31 – column 7, line 49). A single referent set associates synonyms, metonyms, misspellings, and foreign language equivalents into a single set identifying a multimedia data entity to be retrieved. One of a plurality of possible expressions, each referring to the same content, is thus used to determine and access the content. Specifically, in order to retrieve a multimedia entity, an expression describing the entity is input and then found in the thesaurus, whereby the referent set or sets comprising the word are ascertained, thus identifying the related multimedia entities (see column 7, line 65 – column 8, line 21). The thesaurus file is therefore understood to comprise an array of expressions, and for each expression, a link or links ultimately identifying the multimedia entity to which word is associated (for example, see figure 5; and its associated description in column 6, line 31 – column 7, line 49). Consequently, this thesaurus file is considered an object data expression information table, like that of the claimed invention. As an entry in the thesaurus file may be associated with two distinct referent sets (for example, thesaurus item #4 in figure 5 is associated with two distinct referent sets), each set being linked to a distinct multimedia entity, the thesaurus of Cannon is understood to comprise a for expressing at least one first object data,

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i.e. a first multimedia entity, and at least one second object data, i.e. a second multimedia entity, which is different from the first object data.

It would have been obvious to one of ordinary skill in the art, having the teachings of Sumita and Cannon before him at the time the invention was made, to modify the system taught by Sumita such that the information filtering unit additionally receives a thesaurus file, like that described by Cannon, the thesaurus file being used to reference programs in the electronic program guide by keyword. It would have been advantageous to one of ordinary skill to utilize such a combination because a thesaurus file provides for a more accurate determination of media, given a keyword, as is taught by Cannon.

In reference to claim 2, the thesaurus file disclosed by Cannon comprises a link or links for each word in the file, the link or links identifying referent sets, which in turn identify specific multimedia entities (for example, see figure 5; and its associated description in column 6, line 31 – column 7, line 49). As two different words in the thesaurus file may be included in the same referent set (for example, see figure 5), these two different words would be associated with the same link identifying the referent set. Thus, the thesaurus file described by Cannon includes one link identifying two different words, or as expressed in claim 2, one identifier for expressing one object data and at least one object data different from each other.

With respect to claim 4, the thesaurus file described by Cannon comprises, for each word in the file, a link or links identifying referent sets, which in turn identify specific multimedia entities (for example, see figure 5; and its associated description in column 6, line 31 – column 7, line 49). As two different words in the thesaurus file may be included in the same referent set (for example, see figure 5), the two different words in the file would be associated with the same

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link to this referent set. In such a case, the thesaurus file described by Cannon includes one link which identifies, and associates, two variously-expressed words related to the same multimedia content, or as expressed in claim 4, one identifier for expressing at least one object data of the same content, and an identifier link for identifying object data which is variously expressed as one object of the same content when one object data is variously expressed.

Concerning claim 5, Sumita teaches transmitting an electronic program guide to the information filtering unit, which searches the guide by keyword to determine programs of interest to the user (for example, see column 4, lines 39-50). Consequently, it is understood that the above-described thesaurus file, which is used to search the electronic program guide by keyword, is similarly generated by the broadcasting station and transmitted to the information filtering unit. The above-described combination of Sumita and Cannon thus presents a provider system, namely a broadcasting station, which generates the thesaurus, i.e. object data expression information table, and provides it to the client system, specifically an information filtering unit.

Regarding claims 6 and 12, the above-described broadcasting station of Sumita and Cannon maintains multimedia data streams to be provided to the user, and a thesaurus file defining various expression of the multimedia data, as is described above. Consequently, it is understood that this broadcasting station comprises some sort of “content description information storing unit,” which stores the thesaurus, and a “multimedia data storing unit,” which stores multimedia data streams of programs to be serviced to the user. The broadcasting station of Sumita and Cannon is thus considered a server system, like that expressed in claim 6. By the same reasoning, Sumita and Cannon are considered to teach a method, like that recited in claim 12.

With respect to claims 7, 8, and 16 it is understood that the above-described information filtering unit of Sumita and Cannon comprises a data receiving unit for receiving an object data expression information table from a server system and data streams from a multimedia data storing unit, and which outputs this data to a decoder, which decodes the data and outputs it (for example, see column 4, lines 39-48; and column 6, lines 5-42 of Sumita). Additionally, it is understood that the information filtering unit comprises a preference information table storing user preference information extracted from user history information about a prior multimedia program; a data read/write controlling unit for reading and writing data of the preference information table; and a preference information processing unit for mapping object data having various expressions by performing a matching between data decoded in the decoder, namely, the object data expression information table and the preference information data of the preference information table, and which outputs new user preference information and reflects the outputted user preference information to a multimedia system (see column 4, lines 54-67; and column 6, lines 42-56). Lastly, it is understood that the information filtering unit comprises a displayer, which receives the user preference information output from the preference information processing unit, and which outputs the information through an outputting medium, such as a TV or Internet broadcast (see column 4, line 39 – column 5, line 3; and column 9, lines 54-62). The information filtering unit of Sumita and Cannon is therefore considered a client system, like that expressed in claims 7 and 8. By the same reasoning, Sumita and Cannon are considered to teach a method, like that recited in claim 16.

Concerning claim 9, the above-described combination of Sumita and Cannon presents a system whereby a broadcasting station sends a thesaurus to an information filtering unit,

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whereby the information filtering unit compares keywords from a user profile with identifiers in the thesaurus in order to ascertain programs of interest to the user, as is described above. Thus the broadcasting station and the information filtering unit jointly own the thesaurus, whereby identifiers in the thesaurus are compared. Consequently, Sumita and Cannon are considered to teach a method for mapping multimedia data for an efficient matching between user preference information and content description information, wherein a server system, specifically a broadcasting station, and a client system, specifically an information filtering unit, perform mapping of multimedia data by jointly owning an object data expression table and comparing identifiers included in the object data expression table with keywords from a user profile.

Concerning claim 10, the above-described combination of Sumita and Cannon teaches providing a table, specifically a thesaurus, which includes identifiers for various multimedia data and information about various expressions of multimedia data included in an electronic programming guide provided from a server to a client by constructing the thesaurus and comparing data in the thesaurus with keywords from a preference information table, as is described above. It is understood that such actions, i.e. comparing and compounding the thesaurus with the preference information, results in multimedia programs being selected that are of interest to the user, and which ultimately results in updating the preference information of the client (for example, see column 4, lines 36-67 of Sumita). Consequently, Sumita and Cannon are considered to teach a method like that recited in claim 10.

In reference to claim 11, the above-described combination of Sumita and Cannon teaches: transmitting a thesaurus defining expression information about multimedia data having various expressions of the same content and information about a multimedia program to be

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served to a user; mapping multimedia data having various expressions by receiving the transmitted content description information, including the thesaurus and information about multimedia program data, and performing a matching between the received content description information and user preference information extracted from user history information about prior multimedia programs and getting user preference information of contents described in the received content description information and reflecting the gotten use preference information to a multimedia system, specifically video equipment, as is described above. Consequently, the combination of Sumita and Cannon are considered to teach a method like that recited in claim 11.

In reference to claim 13, the thesaurus file disclosed by Cannon comprises a link or links for each word in the file, the link or links identifying referent sets, which in turn identify specific multimedia entities (for example, see figure 5; and its associated description in column 6, line 31 – column 7, line 49). As two different words in the thesaurus file may be included in the same referent set (for example, see figure 5), these two different words would be associated with the same link identifying the referent set. The thesaurus file described by Cannon therefore includes one link identifying two different words, and thus Sumita and Cannon teach defining one identifier for expressing one object data and storing the defined identifier in a table; and generating at least one different object data and storing the at least one different object data in a table, as is recited in claim 13.

As per claim 14, the thesaurus file described by Cannon comprises, for each word in the file, a link or links identifying referent sets, which in turn identify specific multimedia entities (for example, see figure 5; and its associated description in column 6, line 31 – column 7, line

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49). As two different words in the thesaurus file may be included in the same referent set (for example, see figure 5), the link identifying the referent set would be associated with the two different words in the thesaurus file and identify the same multimedia content. In such circumstances, the thesaurus file described by Cannon includes one link which identifies two different words associated the same multimedia content, and thus Sumita and Cannon teach defining one identifier for expressing at least one object data of the same content and storing the one identifier in a table; and generating at least one different object data and storing the at least one different object data in a table, as is recited in claim 14.

As per claims 17-19, the above-described combination of Sumita and Cannon teaches transmitting a table, specifically a thesaurus, from a broadcasting station to an information filtering unit, whereby it is understood that such a transmission occurs when the information filtering unit and the broadcasting station do not jointly own the same copy of the thesaurus. This combination further teaches comparing and compounding the thesaurus with user preference information maintained at the information filtering unit, these comparisons resulting in selecting and sending multimedia programs that are of interest to the user, and ultimately resulting in updating the preference information of the information filtering unit (for example, see column 4, lines 36-67 of Sumita). Consequently, the broadcasting station and information filtering unit described by Sumita and Cannon are considered a “content description information constructor” and a “preference information constructor,” respectively, like that recited in claim 17, and Sumita and Cannon are considered to teach a method like that of claim 17. Regarding claim 18, Sumita and Cannon further teach updating the user’s preference information in response to: generating a thesaurus, which as described above in the rejections for claims 2-4,

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includes identifiers for expressing one or more object data of the same content and various expressions by the identifiers, the thesaurus being generated by the broadcasting station, i.e. content description information constructor; providing the thesaurus generated by the broadcasting station to the information filtering unit, i.e. preference information constructor, as is described above in the rejection for claim 1; and updating preference information by the information filtering unit in response to comparing the thesaurus provided from the broadcasting station with preference information of the information filtering unit, as is described above. Similarly, and specifically regarding claim 19, Sumita and Cannon also teach updating the user's preference information in response to: generating a thesaurus, which as described above in the rejections for claims 2-4, includes identifiers for expressing one or more object data of the same content and representative expressions by the identifiers, the thesaurus being generated by the broadcasting station, i.e. content description information constructor; providing the thesaurus generated by the broadcasting station to the information filtering unit, i.e. preference information constructor, as is described above in the rejection for claim 1; and updating preference information by the information filtering unit in response to mapping an item in of user preference information to an equivalent keyword in the thesaurus by information filtering unit, as is described above.

As per claim 20, the above-described combination of Sumita and Cannon teaches transmitting a table, specifically a thesaurus, from a broadcasting station to an information filtering unit, whereby it is understood that thesaurus comprises keywords stored in lookup table format and that the thesaurus is transmitted when the information filtering unit and the broadcasting station do not jointly own the same copy of the thesaurus. Particularly, the

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keywords are associated with identifiers for use when comparing the thesaurus data with user preference identifiers maintained at the information filtering unit, these comparisons resulting in selecting and sending multimedia programs that are of interest to the user, and ultimately resulting in updating the preference information of the information filtering unit (for example, see column 4, lines 36-67 of Sumita). Consequently, the broadcasting station and information filtering unit described by Sumita and Cannon are considered a “content description information constructor” and a “preference information constructor,” respectively, like that recited in claim 20, and Sumita and Cannon are considered to teach a method like that of claim 20.

Regarding claim 21, the above-described combination of Sumita and Cannon teaches: acquiring keywords from a user profile, whereby it is understood that each keyword has some sort of weight, i.e. value, associated with it in order to ascertain a degree of similarity between the user profile and media information (for example, see column 6, lines 22-56; and column 7, line 50 – column 8, line 3 of Sumita). This combination further teaches retrieving multimedia data by comparing an expression corresponding to each keyword described in the user profile with expression information included in a thesaurus provided from a broadcasting station, i.e. multimedia provider, in order to retrieve multimedia data including a program corresponding to each keyword, as is described above. Lastly, it is understood that the acquired preference value is reflected and the multimedia data is output to a user (for example, see column 4, lines 36-67 of Sumita). Sumita and Cannon are therefore considered to teach a method like that recited in claim 21.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Sumita and Cannon, which is described above, and also over the “OMG Unified Modeling Language Specification” (which is hereafter referred to as the “UML specification”). As described above, Sumita and Cannon teach a method like that recited in claim 12, in which a server system stores an object data expression information table, referred to as a “thesaurus file.” Cannon discloses that this thesaurus file comprises, for each word in the file, a link or links identifying referent sets, which in turn identify specific multimedia entities (for example, see figure 5; and its associated description in column 6, line 31 – column 7, line 49). As two different words in the thesaurus file may be included in the same referent set (for example, see figure 5), the two different words in the file would be associated with the same link to this referent set. In such a case, the thesaurus file described by Cannon includes one link which identifies, and associates, two words related to the same multimedia content. Consequently, Sumita and Cannon are considered to teach defining one identifier for expressing at least one object of the same content and which is stored in a table, and defining an identifier link for identifying object data as the object of the same content when one object data is variously expressed, as is recited in claim 15. Neither Sumita nor Cannon, however, disclose that the identifier link is defined by a UML method, as is recited in claim 15.

Complementing Sumita and Cannon, which teach developing software systems used for accessing multimedia content, the UML specification describes UML, which is a language implemented in the development of such systems for specifying, visualizing, constructing, and documenting the artifacts of software systems (see section 1.1 on page 1-3). The UML specification teaches that visualization and modeling is essential in the development of these

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complex systems, and that UML is a well-defined and a widely accepted choice for such visualization and modeling (see section 1.3.1 on page 1-4). Regarding the claimed invention, the UML specification discloses that UML may be applied to define links between entities in software (for example, see section 3.48 on pages 3-78 and 3-79).

Consequently, it would have been obvious to one of ordinary skill in the art, having the teachings of Sumita, Cannon, and the UML specification before him at the time the invention was made, to develop the software system taught by Sumita and Cannon, including its identifier links, using UML as taught by the UML specification. It would have been advantageous to one of ordinary skill to utilize such a combination because UML is a well-defined and widely accepted choice for visualizing and modeling, which as taught by the UML specification, is essential in the development of such software systems.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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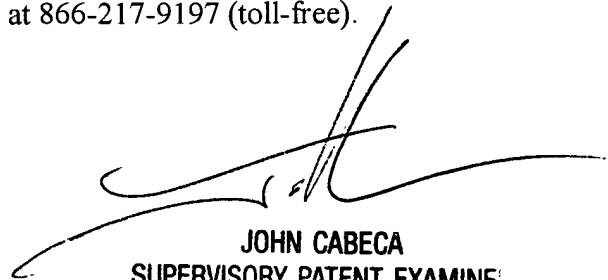
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb



JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100